

8. On January 25th, 2008, the lowest temperature in Iqaluit, Nunavut, was  $-28.5^{\circ}\text{C}$ .

On the same day, the lowest temperature in Inuvik, Northwest Territories, was  $-33.1^{\circ}\text{C}$ .

- a) What is the difference in these temperatures?
- b) Why are there two possible answers to part a?
9. Determine each difference.
- a)  $\frac{17}{3} - \frac{19}{2}$     b)  $-\frac{13}{5} - \frac{7}{3}$     c)  $1\frac{5}{6} - 6\frac{3}{4}$
- d)  $-\frac{19}{6} - \frac{7}{8}$     e)  $\frac{15}{4} - \frac{5}{12}$     f)  $-2\frac{1}{8} - (-4\frac{1}{3})$

11. In Asia, the lowest point on land is the shore of the Dead Sea, which is 417.5 m below sea level. The highest point is the peak of Mount Everest, which 8844.43 m above sea level.

- a) Write each measurement above as a rational number.
- b) Write a subtraction statement that represents the distance between the highest point and the lowest point. What is this distance?

13. Evaluate each expression.

- a)  $\frac{3}{5} - (-\frac{1}{2}) + \frac{2}{3}$
- b)  $-2.34 + 8.6 + (-5.71)$
- c)  $-\frac{16}{5} - (-\frac{14}{3}) + \frac{13}{4}$
- d)  $23.5 + (-12.61) - 3.2$

14. Determine a rational number that makes each statement true. Use a calculator to check your answer.

- a)  $-1.2 - \square \leq 3.7$
- b)  $4.3 - \square \geq 8.9$
- c)  $\square - 2.9 \geq 5.3$
- d)  $\square - 7.2 \leq -10.9$

15. Determine the missing number in each subtraction statement.

- a)  $\square - 28.4 = 37.3$     b)  $\frac{9}{10} - \square = \frac{3}{5}$
- c)  $\square - 0.05 = -2.08$     d)  $\frac{11}{6} - \square = -\frac{7}{3}$
- e)  $-1.25 - \square = 3.75$     f)  $-3\frac{1}{2} - \square = 5\frac{1}{4}$

16. Find two pairs of rational numbers that make each equation true.

- a)  $-7.4 + \square - \square = -10.9$
- b)  $\square - (-12.8) + \square = -1.1$
- c)  $-21.6 - \square - \square = -15.4$

17. Determine the range of numbers that makes each sentence true. Explain your thinking.

- a)  $-11.8 - \square \leq 5.7$
- b)  $6.3 - \square \geq 9.4$